

Daily Report

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08.24.2013

Research

From yesterday I was searching for appropriate datasets, refactoring codes for further development, and improving interactions. Now a status box has been added and selection of data sphere is supported now. The latest demo can be accessed at <http://10.76.0.194:8080/static/3d-barycentric.html>.

Interaction

- **Status box** There is a text area at the top right corner of the interface (Figure 1). Currently it only displays the coordinate of selected data sphere.
- **Selection of data sphere** When mouse pointer is hovering on a data sphere, it will be rendered with red emission. There are two selection modes: *single mode* and *class mode*. In *single mode*, only the selected data sphere will be highlighted, while in *class mode* all the data sphere belonging to the same class of the selected one will be highlighted at the same time.¹

Dataset

The latest dataset applied in the system is Ecoli Dataset². It has 7 real-valued features with 8 different class. Figure 1, 2 and 3 shows some results of this dataset. It seems that the classes are relatively separated however not as clear as the previous Iris Dataset.

Plans for Tomorrow

Research:

- Implement data projection onto the 2D plane;
- try more complex datasets.

Miscellaneous:

- Review the submission of BigdataVis 2013.

¹The mode switch will be implemented in the next few days. Currently *class mode* is always on.

²<https://archive.ics.uci.edu/ml/datasets/Ecoli>

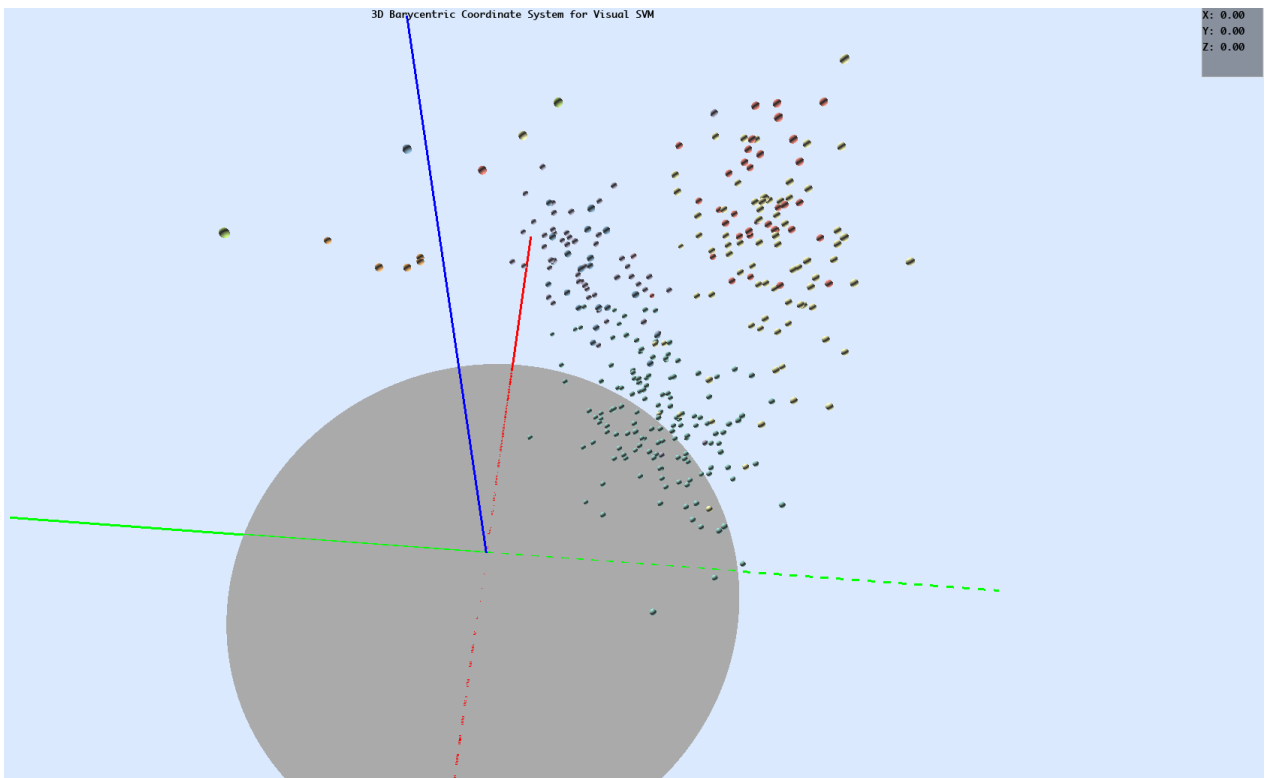


Figure 1: Overview of Ecoli Dataset

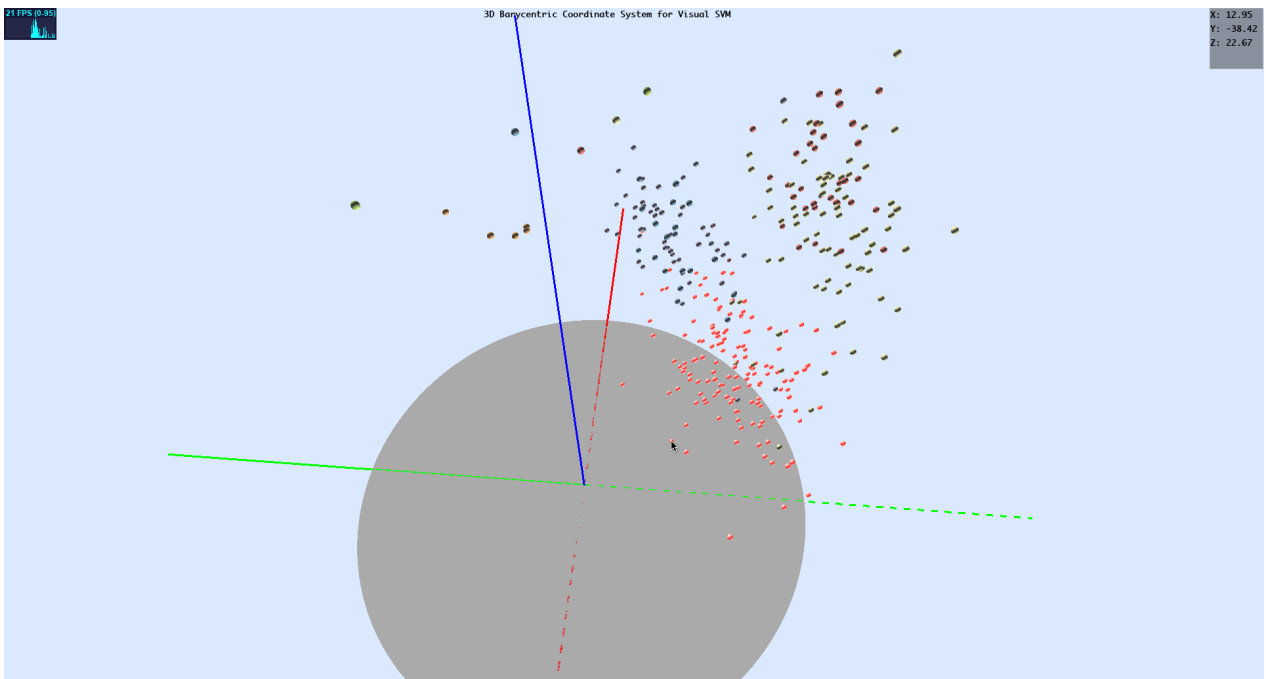


Figure 2: The green class is selected.

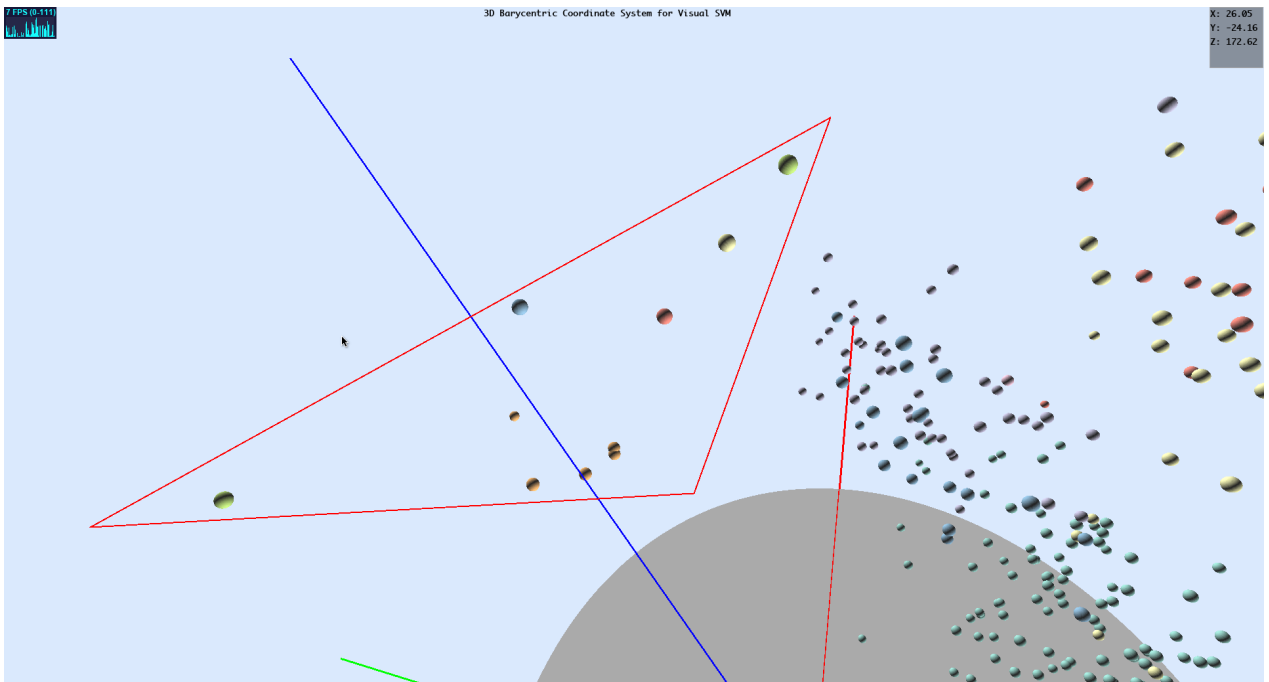


Figure 3: Some outliers in the red triangle.